
IV. OVERVIEW OF ENVIRONMENTAL SETTING

1. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING

This section provides a generalized overview of the physical environmental setting in which the PacifiCenter project site is located. Detailed discussions of environmental setting are provided within each of the specific impact categories presented in Section V, Environmental Impact Analysis. In addition, please refer to Section III, Project Description for detailed information regarding existing on-site conditions.

a. Aesthetics

The PacifiCenter site is located in an urbanized area within the Cities of Long Beach and Lakewood. The project site includes industrial buildings and surface parking areas with minimal landscaping. In addition, due to demolition activities that are currently underway within the project site in conjunction with a mandated soil and groundwater remediation program, portions of the site are comprised of graded land. The majority of the buildings that are occupied on-site are located within 48 acres within the western portion of the site in an area referred to as the Boeing Enclave. Prior to the recent commencement of demolition activities, the PacifiCenter site included over five million square feet of permitted, usable floor area, most of which was provided in low- to mid-rise industrial structures, R&D buildings, and airplane hangars. Several trailers, modular buildings, and other miscellaneous structures were also located throughout the project site. In addition, the eastern portion of the site includes a nine-story, mid-rise, executive office building constructed of black glass on two facades. There are currently chain link fences along the periphery of much of the project boundary and the current demolition activities have been completely enclosed by screen fencing to conceal views of the site. Substantial aesthetic resources are not present within the project site. Prominent aesthetic features within the surrounding vicinity include the San Gabriel Mountains to the distant north and Signal Hill to the southwest. The Lakewood Country Club Golf Course and Sky Links Golf Course may also be considered aesthetic features, although they are not highly visible within the surrounding area. Additional information regarding aesthetics and views is provided in Section V.A, Aesthetics, of this EIR.

b. Air Quality

The PacifiCenter site is located in the South Coast Air Basin (Basin). The Basin is an area of high air pollution potential, particularly from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmosphere mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day. For example, ozone concentrations tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in southern California. The area was previously in non-attainment for all National Ambient Air Quality Standards (NAAQS), except for SO₂. The area is now defined as in attainment for NO₂, lead, SO₂, and CO. While reduced substantially from their peak levels, PM₁₀ and ozone levels are still far from attainment. This year resulted in the worst smog season in seven years. The Basin experienced its first Stage 1 smog episode this summer since 1998, which was primarily due to an unusually strong high pressure system and resulting inversion layer that trapped smog close to the ground.³² Additional information regarding air quality is provided in Section V.B, Air Quality, of this EIR.

c. Cultural Resources

The Long Beach C-1 facility is located within an area historically developed for aviation uses. Douglas Aircraft Company, which subsequently became part of McDonnell Douglas and now the Boeing Company, began airplane production at the site in 1941. The Long Beach facility was built by Douglas to meet wartime aircraft production of World War II. At that time, it was the largest of Douglas' aircraft factories in southern California with more than 1.4 million square feet of covered workspace. During wartime it was a "blackout" facility with limited light-proof access into each of the buildings. The overall grounds and buildings were camouflaged with paint to look like street patterns, trees, and shrubs. For its size, it was also the country's first fully air-conditioned factory. During peak production (1942-1945), the Long Beach plant produced an airplane an hour. None of the buildings, structures, or objects located within the project site has been previously evaluated for historic and/or architectural significance. However, upon concluding the current survey process, one historic resource – a grouping of 18 contributing buildings,

³² *A Stage 1 episode is declared when ozone levels reach a level of 0.20 parts per million (ppm) during a one-hour average. At that level, most people will notice some adverse effects such as shortness of breath, and everyone is urged to avoid strenuous outdoor exercise. Those who are sensitive to smog, including children, the elderly, and people with heart and lung diseases, are advised to stay indoors.*

four non-contributing buildings, and two other features – was identified as a potential historic district eligible for listing on the National Register of Historic Places, the California Register of Historical Resources, and for local designation as a City of Long Beach historic district. Seventeen of the eighteen contributing buildings and the contributing features in this identified potential historic district are in the process of being demolished and removed pursuant to demolition permits issued by the City of Long Beach in order to provide for remediation activities mandated by the California Regional Water Quality Control Board, Los Angeles Region Cleanup and Abatement Order 95-048. Building 15, which is part of the Boeing Enclave, may eventually be demolished to provide for remediation activities or may be demolished to provide for proposed PacifiCenter commercial uses. To provide for a conservative analysis, this document assumes that demolition of the Boeing Enclave, including Building 15, will occur as part of the PacifiCenter project.

Relevant to archaeological resources, the archaeological assessment survey conducted for the project did not determine the existence of any prehistoric archaeological resources within the study area or within a 1-mile radius of the project site. However, because the project site is entirely covered by buildings or surface paving, the property cannot be surveyed by conventional methods. Furthermore, a subsurface testing program could not previously be undertaken due to the safety and security precautions associated with the project site as part of a military and civilian aircraft manufacturing facility. Because survey and testing procedures could not be done, it must be concluded that there is at least the potential for previously unknown, buried archaeological resources to lie beneath the site's surface exists.

With regard to paleontological resources, the record search conducted for the project identified surficial deposits composed of terrestrial Quaternary Alluvium in the uppermost layers of soils within a 1-mile radius of the project site. Since the project site and much of the surrounding vicinity has been previously graded and developed, these deposits do not likely contain significant fossils in the uppermost layers. However, at greater depths, older terrestrial Quaternary deposits that contain significant vertebrate fossils and Plio-Pleistocene marine sediments and fossil vertebrate remains have been identified within a 1-mile radius of the project site.

Additional information regarding paleontological, archaeological, and historic resources is provided in Section V.C, Cultural Resources, of this EIR.

d. Geology

The project site is located in the northern portion of the City of Long Beach and the southwest portion of the City of Lakewood, within the Los Angeles Basin. Maximum

elevations on the site are approximately 54 feet above mean sea level (amsl) at the western border of the site and minimum elevations are approximately 34 feet amsl at the southeast end of the site. Natural soil types found on the project site generally consist of interlayered mixtures of sand, silt, and clay. The entire southern California region is seismically active. As such, the project site and all areas of the Los Angeles Basin are subject to ground shaking of varying intensities from earthquakes on nearby and distant faults. Additional information regarding topography, geology, and seismicity is provided in Section V.D, Geology and Soils, of this EIR.

e. Hydrology and Water Quality

There are no surface water bodies or wetlands located on the project site, although there are several found in the project vicinity. The primary surface water bodies are lakes within the Lakewood Country Club and wetlands within flood control channels.³³ The project site lies within and downstream of a 1,521-acre (2.4-square mile) watershed. Drainage on the site flows to the south and to the east, and the on-site storm drain system point of discharge is located at the southeast corner of the site, where flows discharge into Los Angeles County Flood Control District-owned culverts located under Lakewood Boulevard. Although the site does not have a history of flooding, the Federal Emergency Management Agency Flood Insurance Study indicates that a small portion of the 100-year floodplain extends west across Lakewood Boulevard onto the project site.³⁴ Underlying the project site and vicinity are sediments within the Central Groundwater Basin that extend to depths of over 1,250 feet below land surfaces, forming a sequence of aquitards and aquifers.

The project site contains groundwater aquifers and aquitards, which include the following: Bellflower, Artesia, Gage, Hollydale, Jefferson, Lynwood, Silvarado, and Sunnyside. The Bellflower aquitard, Artesia aquifer, and Gage aquifer are not used for municipal supply purposes due to low yields of groundwater levels. The deep aquifers (i.e., Hollydale, Jefferson, Lynwood, Silvarado, and Sunnyside aquifers) are managed for municipal supply uses within the project vicinity. The most shallow aquifer, the Bellflower Aquifer, is impacted by historic chemical releases on the project site. Extensive groundwater testing shows that all other aquifers have not been impacted by these historic

³³ Tetra Tech, Inc., *Phase I Environmental Site Assessment for Boeing C-1 Facility, February 2000.*

³⁴ *Currently, a Conditional Letter of Map Revisions (CLOMR) is being prepared to remove this portion of the project site from the 100-year floodplain. The CLOMR is standard procedure for removing areas from the FEMA map that are incorrectly shown as part of the 100-year floodplain. As in this case, such errors are typically caused by topographic mapping that is not detailed enough to accurately show the floodplain limits relative to the existing ground conditions.*

releases. The Bellflower Aquifer is the subject of a comprehensive soil and groundwater remediation program mandated by the California Regional Water Quality Control Board, Los Angeles Region, which is described below. Additional information is provided in Sections V.E, Hazards and Hazardous Materials, V.F, Hydrology, and V.G, Water Quality, respectively, of this EIR.

f. Land Use

The project vicinity includes a variety of land uses, such as aviation, office, industrial, recreation, residential, educational, and retail uses. Uses immediately adjacent to the project site include the Long Beach Airport to the south and west, Boeing's 717 assembly facility and office complex to the east, and single-family residences and the Lakewood Country Club to the north and northwest.

The Land Use Element of the City of Long Beach General Plan designates the majority of the project site located within the City of Long Beach as Land Use District (LUD) No. 7 (Mixed-Use), while the southernmost portion of the project site south of the extension of Conant Street is designated LUD No. 12 (Harbor/Airport). Under the Long Beach Zoning Ordinance, the majority portion of the site in the City of Long Beach is currently zoned PD-19 (Douglas Aircraft Planned Development District). In addition, the less than one-acre parcel located at the southwest corner of Lakewood Boulevard and Carson Street is zoned Community Commercial Automobile-Oriented (CCA).

The 23-acre portion of the project site located within the City of Lakewood is designated in the Land Use Element of the Lakewood Comprehensive General Plan as Industrial and is currently zoned M-2 (Heavy Manufacturing). The project site is within the City of Lakewood's Redevelopment Plan for Redevelopment Project Area III. Additional information regarding land use is provided in Section V.H, Land Use and Planning, of this EIR.

g. Noise

The project site and nearby vicinity are primarily exposed to noise generated by traffic on surrounding roadways and freeways, the operations within the Long Beach Municipal Airport, engine testing at Boeing's engine run-up area in the Boeing Enclave, and the separate and ongoing remediation efforts pursuant to the LARWQCB Cleanup and Abatement Order 95-048. The nearest sensitive receptors to the project site are the single-family residences located along and north of Carson Street. Additional information regarding noise is provided in Section V.I, Noise, of this EIR.

h. Public Services

The project site and vicinity are served by several public service providers. Police protection services are provided by the Long Beach Police Department and the Los Angeles County Sheriff's Department. The Long Beach Fire Department and the Los Angeles County Fire Department provide fire protection services to the site. The project site is located within the Long Beach Unified School District. The Long Beach Parks, Recreation and Marine Department and City of Lakewood Recreation and Community Services Department provide parks and recreational facilities for the project site and the surrounding area. Library services are provided by the Long Beach Public Library and the Los Angeles County Public Library system. Additional information regarding police protection, fire protection, schools, recreation, and libraries is provided in Section V.K, Public Services, of this EIR.

i. Transportation/Traffic and Parking

The San Diego Freeway (I-405), the Long Beach Freeway (I-710), the Artesia Freeway (SR-91), and the San Gabriel River Freeway (I-605) provide regional access to the project site. Within the project vicinity, 68 of the 107 existing study intersections currently operate at Level of Service (LOS) D (representing a fair level of service) or better during both the A.M. and P.M. peak hours. Thirty-nine of the existing study intersections operate at LOS E or F in one or both of the peak hours (representing unacceptable levels of service). In addition, all nine of the studied mainline segments on I-405 currently operate at LOS E or F during one or both peak hours and all six of the mainline segments on SR-91 within the study area operate at LOS E or F in both peak hours under existing conditions. Long Beach Transit (LBT) is the primary transit service provider in the City of Long Beach and the project vicinity. The City of Long Beach has a system of Class I, II, and III bikeways that collectively covers approximately 63 miles. The existing bikeway system provides reasonable access to the project site from the east, southeast, and northeast, with more limited access from the west and north. Currently, parking within the project site is comprised of several off-street surface parking lots. Some of this surface parking is in the process of or will be removed as part of the demolition activities associated with the mandated remediation program underway for the project site. Additional information regarding traffic, circulation, and parking is provided in Section V.L, Transportation/Circulation and Parking, of this EIR.

j. Public Utilities

The project site is located within an urbanized area with developed infrastructure systems. Water is provided to the project site by the City of Long Beach Water

Department and the City of Lakewood Department of Water Resources. The City of Long Beach Water Department and County Sanitation Districts of Los Angeles County provide sewer service to the project site. Solid waste collection services with the City of Long Beach are provided by the City of Long Beach Environmental Services Bureau and 21 private, permitted commercial haulers. The City of Lakewood has a franchise agreement with a private hauler for the collection of solid waste generated within the City. Electric service is provided by Southern California Edison and natural gas is supplied by Long Beach Energy. Additional information regarding water, sewer, solid waste, and energy is provided in Section V.M, Utilities, of this EIR.

k. Clean-Up and Abatement of Soils and Groundwater

The Boeing Company is currently implementing a separate and ongoing site wide environmental assessment and remediation program at the project site. This work is being conducted to meet the requirements and schedule of the Cleanup and Abatement Order 95-048 issued by the Los Angeles Regional Water Quality Control Board (LARWQCB) to address historic releases of hazardous materials associated with former aircraft manufacturing activities at the former C-1 site. The California Office of Environmental Health Hazard Assessment (OEHHA) is also providing oversight for human health risk assessment issues.

The remediation program involves a comprehensive environmental assessment program to define the exact extents of impacted soil and groundwater at the site. As of October 2002, all major soil and groundwater assessments have been completed. Approximately 23 localized areas of soil impacted by chemicals and products used at the former facility have been identified as “source areas.” Approximately 15 groundwater plumes have been identified in the Bellflower aquitard beneath the site. Results of sampling conducted in the deeper groundwater zones beneath the property indicate that they have not been impacted.

Soil and groundwater cleanup is underway in several portions of the site. Due to the size of the former C-1 site, it was divided into 18 separate Environmental Investigation Areas (EIAs).³⁵ Remediation is broken down into separate soil and groundwater remediation programs. Soil remediation is being completed in a phased manner. Former industrial buildings and ancillary structures are being demolished and surface soils are being remediated in accordance with LARWQCB requirements (as specifically set forth in the LARWQCB approved Assessment Confirmation and Expedited Remediation (ACER)

³⁵ Fifteen EIAs comprise the project site, while the remaining EIAs are located to the east of the project site.

program). Of the 15 EIAs that comprise the site, regulatory approval for “No Further Action” (NFA) and closure for soils in 12 of the EIAs has been received from the Los Angeles Regional Water Quality Control Board (LARWQCB). These EIAs comprise a total land area of 204 acres, representing approximately 80 percent of the site.³⁶ Regulatory approval of NFA for the 3 remaining EIAs is expected shortly. It is anticipated that the Boeing Enclave will be the last EIA to be remediated. The Boeing Enclave will continue to operate pending, and possibly during, remediation. This may involve the demolition of some or all buildings and ancillary structures dependent on the specific remediation protocols that have yet to be implemented pursuant to the ACER program. LARWQCB will review and confirm the completion of soil remediation efforts for each EIA. For further information regarding applicable cleanup protocols and the status of soil cleanup efforts, refer to Appendix K of this EIR.

Groundwater remediation efforts are also underway on the site. Various treatment methods have been utilized to remediate impacted groundwater, varying from in situ remediation efforts to pump and treat technology depending on the constituent at issue. It is anticipated that this will take a longer period of time to complete than soil remediation due to the geologic and technical constraints associated with groundwater remediation. This ongoing activity will involve limited surface structures and equipment that will not be accessible to new residents or employees at the site. LARWQCB will also review and confirm the completion of groundwater remediation efforts. For further information on the ongoing groundwater remediation program, refer to Appendix K. In addition, as further discussed in Section V.E, Hazards and Hazardous Materials, the Applicant will implement a Risk Management Plan (RMP) to assure the ongoing protection of residents and employees at the PacifiCenter site in relation to these long-term remediation efforts.

For further information see Sections V.E, Hazards and Hazardous Materials, and V.G, Water Quality, of this EIR.

2. BASIS FOR CUMULATIVE IMPACT ANALYSIS

The California Environmental Quality Act (CEQA) requires that Environmental Impact Reports (EIRs) analyze cumulative impacts. CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered

³⁶ *It should be noted that several smaller “carve-out” areas have been created in several of the closed EIAs. Further investigation and remediation will be conducted in these smaller areas contained within 5 EIAs until soil clean-up goals are reached. Upon completion of this work to the satisfaction of the LARWQCB, closure and NFA will be requested for soil in these remaining carve-out areas.*

together, are considerable or which compound or increase other environmental impacts.” In addition, CEQA Guidelines Section 15130(b) indicates that the analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed project, but instead is to “be guided by the standards of practicality and reasonableness.”

Cumulative impacts are anticipated impacts of the project along with reasonably foreseeable growth. According to CEQA Guidelines Section 15130(b)(1)(A) and (B), reasonably foreseeable growth may be based on either of the following:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

The PacifiCenter project is anticipated to be implemented through the year 2020, as discussed in Section III, Project Description. Given the planning horizon associated with the project, sole use of a list of anticipated future projects was deemed inappropriate and infeasible as such a list typically covers only a 2- to 5-year period. Therefore, it was determined that land use projections through 2020 by the Southern California Association of Governments (SCAG), as supplemented by a list of approved and proposed projects that are planned in the surrounding project area would be used as the basis for the cumulative analyses in the EIR. This data will be used to conduct the analysis of cumulative impacts for each environmental issue, as appropriate. The list of identified related projects is used to supplement SCAG’s forecast and is provided in Table 3 on pages 160 through 163 with the locations of each of the related projects listed in Figure 21 on page 164. This list was compiled in November 2002, at the same general time the NOP for the project was circulated. Subsequent to the initial preparation of this list, several projects were added. In addition, although several of the projects in this list have been completed, they still remain relevant since the traffic counts for the project’s traffic analysis were conducted as early as November 2002 and thus would not have included the traffic from these projects which were not yet built.

Table 3
Related Projects Description

Map No.	Size	Description	Location	Jurisdiction
1	1,131 sf	Market Expansion	5453 South Street	Lakewood
2	16,500 sf	Church	3114 South Street	Lakewood
3	11 du	Apartment	20808 Seine Avenue	Lakewood
4	15 du	Apartment	20603 Seine Avenue	Lakewood
5	19,676 sf	Shopping Center	4116-4128 South Street	Lakewood
6	94,268 sf	Department Store (Kohl's)	2650 Carson Street	Lakewood
7	8,015 sf	Restaurant/Bar	4634 Candlewood Street	Lakewood
8	6,853 sf	Restaurant	4404 Candlewood Street	Lakewood
9	168,000 sf	Department Store (Target)	Del Amo and Lakewood (Lakewood Center Mall)	Lakewood
10	14,436 sf	Drug Store (Walgreens)	5829 Lakewood Boulevard	Lakewood
11	35,192 sf	Retail (tenant improvement)	Del Amo and Lakewood (Lakewood Center Mall)	Lakewood
12	9,587 sf	Commercial Retail	2700-18 Carson Street	Lakewood
13	12,000 sf	Drug Store (CVS)	4909 Paramount Boulevard	Lakewood
14	2,700 sf	Commercial Retail	4925-63 Paramount Boulevard	Lakewood
15	10 du	Condominium	11716-24 205th Street	Lakewood
16	8 du	Condominium	11711-19 216th Street	Lakewood
17	20 du	Condominium	20741-20809 Seine Avenue	Lakewood
18	8 du	Single-Family Residential (planned development)	5813 Allington Street	Lakewood
19	20 du	Single-Family Residential (planned development)	SE corner of Paramount and Candlewood	Lakewood
20	430 rm	Hotel	100 East Ocean Boulevard	Long Beach
21	16,200 sf	Drug Store (Sav-On)	6000 Atlantic Avenue	Long Beach
22	160 du	Apartment	3801 Pacific Coast Highway	Long Beach
23	106 du	Single-Family Residential	2080 Obispo Avenue	Long Beach
24	500,000 sf	Commercial/Entertainment	Shoreline Drive & Pine Avenue	Long Beach
25	162 rm	Hotel	201 The Promenade	Long Beach
26	400,000 sf	Technology Park Industrial/R&D	2000 West 19th Street	Long Beach
27	82 du	Condominium (50 adaptive reuse/ 32 new construction)	835 Locust Street	Long Beach
28	92,000 sf	Self Storage	4200 Pacific Coast Highway	Long Beach
29	66 du	Condominium	1000 E. Ocean Boulevard	Long Beach
30	770 du	Apartment	300 W. Ocean Boulevard	Long Beach
	500 rm	Hotel		
	25,000 sf	Commercial		
31	302 du	Residential	6400 E. Pacific Coast Highway	Long Beach
	199 rm	Hotel		
32	470,000 sf	Retail	301 Long Beach Boulevard	Long Beach
	250 du	Apartment		
33	75,100 sf	Self Storage	2323 South Street	Long Beach

Table 3 (Continued)

Related Projects Description

Map No.	Size	Description	Location	Jurisdiction
34	179,000 sf	General Office	5950 Spring Street	Long Beach
35	15,200 sf	Drug Store	1250 E. Pacific Coast Highway	Long Beach
36	34 du	Condominium	834 E. Fourth Street	Long Beach
	6,900 sf	Commercial		
37	20,000 sf	Police Station	4891 Atlantic Avenue	Long Beach
38	10 du	Condominium	23 Fourth Place	Long Beach
39	556 du	Condominium	350 E. Ocean Boulevard	Long Beach
40	48 du	Apartment	248 W. Broadway	Long Beach
	9,000 sf	Commercial		
41	105,800 sf	Hospital	2702 Long Beach Boulevard	Long Beach
42	8,000 sf	Specialty Retail Center	2302 Bellflower Boulevard	Long Beach
43	66 du	Apartment	1601 Pacific Avenue	Long Beach
44		Boeing—Cleanup and Abatement Order 95-048	Lakewood Boulevard and Carson Street	Long Beach
45	63 du	Senior Citizens Assisted Living (conversion)	117 E. Eighth Street	Long Beach
46		Queen Mary Expanded Attractions	1126 Queen's Highway	Long Beach
	50,000 sf	Attraction Venue		
	1,300 sp	Parking Structure		
47	52 du	Single-Family Residential	301 Manila Avenue	Long Beach
48	69 rm	Hotel	517 E. First Street	Long Beach
49		Parking Structure for Carnival Cruise Ships	1126 Queen's Highway	Long Beach
50	7,000 sf	Retail	3400 Long Beach Boulevard	Long Beach
	1,500 sf	Fast-Food Restaurant with Drive-Thru		
51	19,500 sf	Commercial	190 Marina Drive	Long Beach
52	16 du	Residential Lofts (conversion)	829 Pine Avenue	Long Beach
53	35 du	Condominium	6000 Loynes Drive	Long Beach
54	71,536 sf	Self-Storage	5400 Paramount Boulevard	Long Beach
	1,100 sf	General Office		
55	106,636 sf	Self-Storage Facility and RV Parking	6897 Paramount Boulevard	Long Beach
56	58,500 sf	Shopping Center	120 Studebaker Road	Long Beach
57	6,172 sf	Commercial	3918-3926 Long Beach Boulevard	Long Beach
	2,714 sf	Fast-Food Restaurant with Drive-Thru		
58	11,984 sf	Commercial	1570-1598 Long Beach Boulevard	Long Beach
59	3,200 sf	Fast-Food Restaurant with Drive-Thru	1840 Long Beach Boulevard	Long Beach

Table 3 (Continued)

Related Projects Description

Map No.	Size	Description	Location	Jurisdiction
60	519,135 sf	Self-Storage	712 W. Baker Street	Long Beach
61	11,550 sf	Drug Store with Drive-Thru	3570 Atlantic Avenue	Long Beach
62	30,000 sf	Education Building	2244 Clark Avenue	Long Beach
63	15,000 sf	Commercial	2005-2011 Long Beach Boulevard	Long Beach
64	5 du	Single-Family Residential	315 Flint Avenue	Long Beach
65	11 du	Condominiums (conversion)	201-205 E. Broadway	Long Beach
66	10,000 sf	Office/Retail	1900 Atlantic Avenue	Long Beach
67	4,000 sf	Expansion/Remodel of Target Store (net increase)	2270 Bellflower Boulevard	Long Beach
68	41,000 sf	Church Expansion	5950 E. Willow Street	Long Beach
69	6,356 sf	Industrial Building	1690-1694 Cota Avenue	Long Beach
70	201 rm	Transitional Housing Facility	2001 River Avenue	Long Beach
71	16,000 sf	Public Library	1401 E. Anaheim Street	Long Beach
72	5,750 sf	Commercial Shopping Center	1422 W. Willow Street	Long Beach
73	26,000 sf	Self-Storage Facility	3401 Golden Avenue	Long Beach
74	7,200 sf	Medical Office	2760 Atlantic Avenue	Long Beach
75	5,800 sf	Retail	4085 Atlantic Avenue	Long Beach
76		California State University Long Beach Expansion	Atherton Street and Palo Verde Avenue	Long Beach
	120,000 sf	Recreation Center		
		New Parking Structure		
77		Long Beach Airport Terminal Area Improvements ^a	4100 Donald Douglas Drive	Long Beach
	43,000 sf	Building Improvements		
	4,000 sp	Parking Structure		
78	156 du	Senior Assisted Housing	SW corner of Cherry Avenue and Willow Street	Long Beach
79	270 du	Single-Family Residential	Hill Street between	Signal Hill
	44 du	Duplexes	Cherry Avenue/Temple Avenue	
	150 du	Multi-Family Residential		
80	172 du	Single-Family Residential	North of Hill Street at Hathaway Avenue	Signal Hill
81	20 du	Single-Family Residential	Hathaway Avenue and Temple Avenue	Signal Hill
82	120,000 sf	Self Storage Facility	California and 32nd Street	Signal Hill
83	4 du	Single-Family Residential	Freeman Avenue and 20th Street	Signal Hill
84	130,000 sf	Retail	Atlantic Avenue and Spring Street	Signal Hill

Table 3 (Continued)

Related Projects Description

Map No.	Size	Description	Location	Jurisdiction
85		Kilroy (est. remaining entitlement)	South of Spring Street between Lakewood Boulevard and Redondo Avenue	Long Beach
	359 ksf	359,000 sf Office		
	220 rm	220-Room Hotel		
86		LB Business Park (est. remaining entitlement)	SEC of Lakewood Boulevard and Spring Street	Long Beach
	288 sf	288,000 sf Office		
	105 rm	105-Room Addition to Existing Hotel		

^a Based on the November 2003 NOP for the Long Beach Airport Terminal Area Improvements, the terminal improvements are being designed to accommodate 41 air carrier flights and 25 commuter flights, passengers associated with those flights, and security requirements imposed by the Transportation Security Administration. This flight level is anticipated to result in approximately 3.8 million annual passengers (MAP) being served at the Airport. As of November 2002, 38 air carrier and 3 commuter flights were generated by the Airport. The traffic study provided in Appendix Q assumes the Airport will accommodate the full 41 air carrier flights and the 25 commuter flights.

Source: Crain & Associates, Traffic Study January 2004 (list compiled in November 2002 with projects added in August 2003).

Cumulative study areas are defined based on an analysis of the geographical scope relevant to each particular environmental issue. Therefore, the cumulative study area for each individual environmental impact issue may vary. For example, a cumulative visual impact generally could only affect the area within the view of the project site, while a cumulative air quality impact could affect the entire Southern California Air Basin. The specific boundaries and the projected growth within those boundaries, for the cumulative study area of each environmental issue, are identified in the applicable environmental issue section in Section V, Environmental Impact Analysis, of this EIR.

3. THRESHOLDS OF SIGNIFICANCE

As set forth by CEQA Guidelines Section 15064.7, a threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental



Scale Not Provided
Source: Crain & Associates, 2004

Figure 21
Related Projects Location Map

effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect will normally be determined to be less than significant. The thresholds of significance used by the City of Long Beach for this project are based on the questions presented in Appendix G of the CEQA guidelines as well as other specific guidance within the CEQA Guidelines, regulations within the Public Resources Code, standards and guidance from other agencies and various departments within the City of Long Beach. This EIR includes the following specific thresholds of significance that have been identified for each of the specific environmental issue areas that are addressed:

A. AESTHETICS

Impacts to aesthetics will be considered significant if:

- Components of the project will be inconsistent with applicable plans and policies, as set forth by the Cities of Long Beach and Lakewood General Plans and Zoning Ordinances;
- The project will substantially degrade the existing visual character or quality of the site and its surroundings;
- The height and massing of structural elements proposed by the project will not be compatible with existing development within comparable zones or substantively exceed expectations associated with adjoining zones within the surrounding area; or
- Features or elements that contribute positively to the visual character of the area will be removed or demolished.

Impacts to views will be considered significant if:

- Implementation of the proposed project will conflict with applicable regulations relating to view resources, as set forth by the Cities of Long Beach and Lakewood General Plans and Zoning Ordinances;
- Project development will substantially obstruct valued views of on- or off-site aesthetic features from public or private vantages; or
- The project has a substantial adverse effect on a scenic vista.

Impacts associated with light and glare will be considered significant if:

- Implementation of the proposed project will conflict with applicable regulations relating to visual resources associated with light and glare, as set forth by the Cities of Long Beach and Lakewood General Plans and Zoning Ordinances;
- The project creates a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- The project will include highly reflective surfaces that produce intense glare onto adjacent glare-sensitive uses.

B. AIR QUALITY

Construction Emissions

The SCAQMD has promulgated daily emission thresholds for construction activities that promote or maintain regional attainment of the relevant ambient air quality standards. A project is deemed to have a significant impact on regional air quality if emissions of criteria pollutants (specified in pounds of pollutant emitted per day) related to project construction exceed the significance thresholds summarized in Table 4 on page 168.

While the *SCAQMD CEQA Air Quality Handbook* does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM₁₀, NO₂, and CO in its recently adopted document titled “*SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)*”, June 19, 2003. Based on this guidance, the following additional significance thresholds are used in this analysis for determining potential air quality impacts from on-site construction activities.

- If the project causes an incremental increase in localized construction concentrations of 10.4 µg/m³ for PM₁₀ (24-hours), 188 µg/m³ for NO₂ (1-hour), 11,500 µg/m³ for CO (1-hour), or 3,680 µg/m³ for CO (8-hours).

The SCAQMD also provides additional indicators of potential air quality impacts in Chapter 6 of the *SCAQMD CEQA Air Quality Handbook*. Whenever possible, these additional indicators should be evaluated in a quantitative analysis; otherwise a qualitative analysis is appropriate. Based on these indicators, the following additional significance

thresholds are used in this analysis for determining potential construction-related air quality impacts.

- If the project emits carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million above background risk levels.
- If the project creates objectionable odors affecting a substantial number of people.

Operation Emissions

The SCAQMD has promulgated daily emission thresholds for operational activities that promote or maintain regional attainment of the relevant ambient air quality standards. A project is deemed to have a significant impact on regional air quality if emissions of criteria pollutants (specified in pounds of pollutant emitted per day) related to project operation exceed the significance thresholds summarized in Table 4 on page 168.

While the *SCAQMD CEQA Air Quality Handbook* does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM₁₀, NO₂, and CO in its recently adopted document titled “*SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)*”, June 19, 2003. Based on this guidance, the following additional significance thresholds are used in this analysis for determining potential air quality impacts from on-site stationary sources.

- If the project causes an incremental increase in localized concentrations of 2.5 µg/m³ for PM₁₀ (24-hours), 188 µg/m³ for NO₂ (1-hour), 11,500 µg/m³ for CO (1-hour), or 3,680 µg/m³ for CO (8-hours) from on-site stationary sources.

The SCAQMD also provides additional indicators of potential air quality impacts in Chapter 6 of the *SCAQMD CEQA Air Quality Handbook*. Whenever possible, these additional indicators should be evaluated in a quantitative analysis; otherwise a qualitative analysis is appropriate. Based on these indicators, the following additional significance thresholds are used in this analysis for determining potential operation-related air quality impacts.

Table 4
SCAQMD SIGNIFICANCE THRESHOLDS

	Project Construction (pounds per day)	Post-Construction Project Operations (pounds per day)
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO _x)	100	55
Reactive Organic Compounds (ROC)	75	55
Particulate Matter (PM ₁₀)	150	150
Sulfur Oxides (SO _x)	150	150

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993.

- If the project causes an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively, at an intersection or roadway within one-quarter mile of a sensitive receptor.³⁷
- If the project emits carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million above background risk levels.
- If on-site hazardous materials result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.
- If the project will be occupied by sensitive individuals within one-quarter mile of existing facilities that could result in an incremental maximum individual cancer risk of 10 in one million (1×10^{-5}) or a Hazard Index of 1.0 for noncarcinogens.
- If the project creates objectionable odors affecting a substantial number of people.
- The project will not be compatible with SCAQMD and SCAG air quality policies if the project causes an increase in the frequency or severity of existing air quality violations;

³⁷ In cases where the background concentration at the intersection already exceeds the State 1-hour and 8-hour CO standards, a measurable increase of one ppm for the 1-hour standard and 0.45 ppm for the 8-hour standard is used as the significance threshold.

- causes or substantially contributes to new air quality violations;
 - delays timely attainment of air quality standards or the interim emission reductions specified in the AQMP; or
 - exceeds the growth assumptions utilized in preparing the SCAQMD's AQMP.
- If the project is inconsistent with the air quality goals and policies set forth within the General Plans.

C. CULTURAL RESOURCES

Impacts to archaeological resources will be considered significant if:

- The project will cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15564.5 of the CEQA Guidelines.

In accordance with Section 21083.2 of the CEQA statute, project impacts to archaeological resources are considered significant if project activities could cause the damage to, and/or destruction of, a site that has been identified as archaeologically unique. The CEQA Guidelines also note that if an archaeological resource is identified as neither a unique archeological resource nor a historical resource, the affects of the project on those resources shall not be considered a significant effect on the environment (CEQA Guidelines § 15064.5(c)(4). Impacts to historic resources will be considered significant if:

- The project will cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.

According to Section 15064.5(b), a project involves a “substantial adverse change” when one or more of the following occurs:

- Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
- The significance of a historical resource is materially impaired when a project:

- a. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
1. b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or³⁸
2. c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.³⁹

Impacts to paleontological resources will be considered significant if:

- The project will directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

D. GEOLOGY AND SOILS

For the purposes of this analysis, a distinction is made between geotechnical impacts associated with proposed grading and site design activities and impacts related to seismic events. Impacts will be considered significant if:

Grading and Site Design

- Development of the proposed project will result in substantial soil erosion or the loss of topsoil;

³⁸ State CEQA Guidelines, 14 CCR Section 15064.5(b)(1).

³⁹ State CEQA Guidelines, 14 CCR Section 15064.5(b)(1).

- The project will be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse;
- The project will be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Proposed grading and earthmoving plans are not in accordance with applicable City of Long Beach or City of Lakewood regulations.

Seismicity

- The proposed project will expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - Strong seismic ground shaking; or
 - Seismic-related ground failure, including liquefaction.

E. HAZARDS AND HAZARDOUS MATERIALS

Impacts associated with health and safety hazards and the use of hazardous materials would be considered significant if the project will:

Hazardous Materials

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or

Airport Safety

- Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.

F. HYDROLOGY

Hydrology impacts will be considered significant if the project will:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

G. WATER QUALITY

Surface water quality and groundwater quality impacts will be considered significant if:

Surface Water

- Development of the proposed project degrades the surface water quality of receiving waters to levels below standards considered acceptable by the LARWQCB or other regulatory agencies or development of the proposed project violates waste discharge requirements;
- Activities associated with the proposed project impair the beneficial uses of the receiving waters;

Groundwater

- Development of the proposed project degrades the groundwater quality to levels below standards considered acceptable by the LARWQCB or other regulatory agencies; or
- Development of the proposed project substantially depletes groundwater supplies or interferes substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

H. LAND USE AND PLANNING

A land use impact will be considered significant if the proposed project will result in:

- Conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect;
- Non-conformance with the applicable goals, objectives, and requirements of the City of Long Beach General Plan, Strategic Plan 2010, or Zoning Ordinance, or the City of Lakewood General Plan, Redevelopment Area III Plan, or Zoning Ordinance; or

- Substantial conflicts with surrounding land uses due to an incompatible interface between such uses and the physical and/or operational characteristics of the proposed uses.

I. NOISE

In general, impacts to noise will be considered significant if the project will result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project will expose people residing or working in the project area to excessive noise levels.

In order to determine if the project exceeds any of the general thresholds listed above, more specific noise thresholds are typically applied. In accordance with the CEQA Guidelines, the following specific significance thresholds were used to evaluate the project's short-term construction and long-term operations impacts. These thresholds are based on applicable federal, state, and local policies and regulations.

Construction Noise

Neither the City of Long Beach nor the City of Lakewood have established significance thresholds for construction noise impacts. In the absence of such thresholds

and consistent with thresholds often used in other jurisdictions, including the City of Los Angeles, a significant impact associated with construction noise will result if :⁴⁰

- Project construction activities lasting more than 10 days in a three-month period will exceed existing ambient exterior noise levels by 5 dBA L_{eq} or more at a noise sensitive use.

Roadway Noise

A significant impact will occur if any of the significance thresholds listed below are exceeded:

- Project traffic causes an increase in CNEL along any roadway segment by 5 dBA or more when the CNEL is within the acceptable range as shown on the Community Compatibility Matrix.
- Project traffic increases the CNEL along any roadway segment by an audible amount (3 dBA or more) and causes the noise levels to move from acceptable range to unacceptable range as shown on the Community Compatibility Matrix.

Airport Noise

In compliance with California Title 21, Caltrans' California Airport Land Use Planning Handbook, and FAA Guidelines, a significant impact will occur if proposed residential uses and associated outdoor recreational areas were located within the published Airport 65 CNEL contour.

Aviation-related Uses

In compliance with Chapter 16.43 of the LBMC, a significant impact will occur if proposed aviation-related uses will result in aircraft using the Long Beach Airport that will not comply with the Noise Ordinance SENEL limitations.

⁴⁰ L.A. CEQA Thresholds Guide, August 2001.

On-site Activities

Within the portion of the project site located within the City of Long Beach, a significant impact associated with on-site activities (i.e., aviation-related uses, mechanical, equipment, parking facilities) will occur during daytime (7:00 A.M. to 10:00 P.M.) and nighttime (10:00 P.M. to 7:00 A.M.) hours if:

- Exterior noise levels for predominantly residential or commercial uses exceed those set forth by Section 8.80.150 of the LBMC and presented in Table 28 on page 492. Noise levels in excess of the levels indicated in Table 28 are conditionally permitted, depending on the intensity of the noise and the duration of exposure. Specifically, noise levels may not exceed the exterior noise standard for a cumulative period of more than thirty minutes in any hour; or plus five decibels for a combined period of more than fifteen minutes in any hour; or plus ten decibels for a combined period of more than five minutes in any hour; or plus fifteen decibels for a combined period of more than one minute in any hour; or plus twenty decibels for any period of time (maximum noise level).⁴¹
- Interior noise levels for residential uses exceed those set forth by Section 8.80.170 of the LBMC and presented in Table 29 on page 493. Noise levels in excess of the levels indicated in Table 2 are conditionally permitted, depending on the intensity of the noise and the duration of exposure. Specifically, noise levels may not exceed the interior noise standard for a cumulative period of more than five minutes in any hour; or plus five decibels for a combined period of more than one minute in any hour; or plus ten decibels for any period of time (maximum noise level).⁴²

In addition, a significant impact will occur as a result of on-site activities in the City of Lakewood portion of the site if:

⁴¹ *If the existing exterior ambient noise level exceeds that permissible within the noise limit categories, the allowable noise exposure standard is increased to ambient conditions (Section 8.80.150 of the LBMC). In addition, Section 8.80.240 of the LBMC (vehicle, motorboat or aircraft repair and testing) provides an exemption to the exterior noise limits (Section 8.80.150 of the LBMC) for aircraft within the airport property or within any other aviation-related property abutting it.*

⁴² *If the existing interior ambient noise level exceeds that permissible within the noise limit categories, the allowable noise exposure standard is increased to ambient conditions (Section 8.80.170 of the LBMC). Section 8.80.240 of the LBMC (vehicle, motorboat or aircraft repair and testing) provides an exemption to the interior noise limits (Section 8.80.170 of the LBMC) for aircraft within the airport property or within any other aviation-related property abutting it.*

- In accordance with the LMC, any person within any area zoned for residential use or any area adjacent to residential use operates air conditioners, mechanical equipment, or mechanical machinery that causes the noise level at the residential property line to exceed 65 dBA L_{eq} .⁴³
- In accordance with the LMC, commercial noise levels exceed 60 dBA L_{eq} at residentially zoned or occupied property.⁴⁴

Ground-borne Vibration

The City of Long Beach and Lakewood do not have any adopted policies or standards for construction ground-borne vibration. However, the Federal Transit Authority (FTA) provides a construction equipment vibration damage threshold criterion of 0.20 inches per second PPV for fragile buildings (U.S.DOT, 1995). In the absence of any City significance thresholds for vibration associated with construction, an exceedance of the FTA standard was used to determine construction vibration impacts.

The City of Long Beach's vibration perception criteria described above will be used to evaluate potential impacts associated with operation of the project site. A significant impact will occur if;

- Project operation activities cause a RMS of 0.01 inch/sec at or beyond the property boundary of the source if on a private property or at 150 feet from the source if on a public space.

J.1. EMPLOYMENT

An employment impact will be considered significant if construction and operation of the proposed project substantially alters the location, distribution, density, or growth rate of employment planned for the area pursuant to local and regional plans or if the project does not support relevant local or regional policies regarding employment.

⁴³ LMC, Section 9376.

⁴⁴ LMC, Section 9347.

J.2. HOUSING

A project will have a significant housing impact if its construction, operation, or associated indirect demand substantially alters the location, distribution, density, or growth rate of housing contemplated for the area by regional or local plans or if the project does not support relevant local or regional policies regarding housing.

J.3. POPULATION

A project will have a significant impact on population if the construction and operation of the project substantially alters the location, distribution, density, or growth rate of population planned for the area by local and regional plans.

K.1. POLICE

Impacts to police protection services will be considered significant if:

- The proposed project substantially reduces the existing level of police protection services within the area surrounding the project site;
- The proposed project results in a substantial increase in emergency response times within the area surrounding the project site; or
- The project would result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, or the need for new or physically altered facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police services.

K.2. FIRE PROTECTION

Impacts to fire protection and emergency medical services will be considered significant if:

- Fire flows are inadequate to meet new land use and building requirements;

- Response times are substantially increased from fire station(s) to the project site;
- The Insurance Service Organization lowers its rankings for the Cities of Long Beach or Lakewood;
- The Fire Departments determine that current fire protection services and facilities cannot adequately accommodate project demands;
- The project will impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- The project will result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, or the need for new or physically altered facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.

K.3. SCHOOLS

Impacts on school facilities will be considered significant if the proposed project will result in a need for substantial expansion of existing schools or the construction of additional schools to maintain acceptable performance levels.

K.4. RECREATION

Impacts to recreational facilities will be considered significant if:

- The proposed project creates a demand for recreational facilities that causes the existing ratio of developed parkland per resident to substantially decrease;
- Development of the proposed project substantially increases the demand for local park and recreational facilities for which current demand already exceeds the ability of facilities to adequately serve the population;
- The proposed project results in conflicts with parks and recreation goals or standards set forth by the City of Long Beach or the City of Lakewood;

- The project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and applicable fees or project design features will not offset the cost for providing replacement park and recreational facilities; or
- The project includes recreational facilities or requires the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

K.5. LIBRARIES

Impacts to library services will be considered significant if anticipated demand for libraries associated with the proposed project will substantially exceed the supply of existing and planned library resources.

L. TRANSPORTATION AND CIRCULATION

In general, impacts to transportation, circulation, and parking will be considered significant if the project will:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

In order to determine if the project exceeds any of the general thresholds listed above, more specific transportation, traffic, and parking thresholds are typically applied. According to City of Long Beach criteria, a significant impact associated with traffic at analyzed intersections would occur if:

- The project results in a worsening of the volume-to-capacity ratio by 0.020 or more and a final (“with project”) LOS of E or F.

According to the CMP, a significant regional CMP impact will occur if:

- Implementation of the project increases the D/C ratio at a CMP location by 0.020 or more with a final LOS of F.

According to the City of Long Beach criteria, a significant impact to residential street segments will occur if:

- The project contributes 500 or more net daily trips (total both directions) or 50 or more net hourly trips (total both directions) to a residential street segment.⁴⁵

A significant impact to public transit service will occur if:

- The project results in a substantial increase in ridership on the existing public transit system, thereby necessitating improvement of the system to accommodate the additional demand; or
- The project conflicts with adopted policies, plans or programs supporting alternative transportation.

A significant impact to bicycle and pedestrian circulation will occur if:

- The project is not in compliance with applicable plans or regulations; or
- The project will disrupt existing bicycle or pedestrian routes.

A significant impact to parking will occur if:

- The project will result in inadequate parking capacity.

M.1. WATER

Impacts to water supply will be considered significant if, after project-related infrastructure improvements:

⁴⁵ *The City of Long Beach has recommended this threshold for the analysis of residential street segments.*

- The estimated water requirements for the proposed project exceed available water supplies or the capacity of the existing delivery system in conjunction with planned improvements proposed for the project by a substantial magnitude; or
- Any alterations to the water system made necessary by the proposed project reduce or inhibit the capacity of the water system serving the project area.

M.2. SEWER

Impacts to sewer capacity will be considered significant if, after project-related infrastructure improvements:

- The increase in project-generated wastewater will exceed the existing or planned capacity of the wastewater delivery system and/or wastewater treatment plant(s) serving the project site by a substantial magnitude;
- Alteration to existing infrastructure will substantially reduce or inhibit the ability of the sewer system to serve the project site or the area surrounding the project site;
- Wastewater treatment requirements of the applicable Regional Water Quality Control Board would be exceeded;
- The project would require the construction of a new wastewater treatment facility or expansion of an existing facility, the construction of which could cause significant environmental effects; or
- The wastewater treatment provider that serves the project determines that there is not adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

M.3. SOLID WASTE

In general, a project's impact on solid waste is considered significant if:

- The project would not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or

- The project would not comply with federal, state, and local statutes and regulations related to solid waste.

Based on the complex system of waste disposal using numerous landfills within and outside of Los Angeles County as well as research regarding significance thresholds employed or considered in other Southern California jurisdictions (presented in Appendix U, Research of Solid Waste Impact Thresholds), a more specific threshold of significance for solid waste impacts is used herein. Specifically, a significant impact to solid waste disposal facilities will occur if:

- Solid waste disposal generated by implementation of the proposed project or cumulative projects is determined to represent more than one percent of the forecasted cumulative Countywide increase in the solid waste stream flowing into major County solid waste facilities between 2003 and 2020.

M.4. ENERGY

Impacts to energy will be considered significant if, after project-related infrastructure improvements, the project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, or the need for new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service.
- Results in the use of substantial amounts of fuel and/or energy.